

Ronald B. Mitchell. "Forms of Discourse, Norms of Sovereignty: Interests, Science, and Morality in the Regulation of Whaling" In The Greening of Sovereignty in World Politics. Editor: Karen Litfin. MIT Press, 1998, 141-171.

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Forms of Discourse, Norms of Sovereignty: Interests, Science, and Morality in the Regulation of Whaling

Ronald B. Mitchell

Introduction¹

Many environmentalists have argued that existing norms of state sovereignty promote environmental degradation. In particular, the overuse of global common-pool resources is often attributed to international legal norms that define various international commons as open-access resources and allow governments to make independent decisions about their use. To reduce such overuse, governments increasingly have sought to use international legal conventions to redefine the rights of states in areas of common jurisdiction. By redefining these rights, states are redefining sovereignty. Given the weakness of international law within an anarchic international system, however, altering legal definitions of sovereignty need not alter the actual practice of sovereignty. The question then arises: Under what conditions will de jure redefinitions of sovereignty alter the de facto practices of sovereignty that destroy the environment?

The success of efforts to alter sovereign practice by redefining sovereign rights depends upon the form of discourse used to justify the redefinition. Put differently, rhetorical justifications influence the practical legitimacy accorded to a nominally binding international legal norm of sovereignty. The case of international regulation of whaling provides one illustration that a redefinition of sovereignty established through a discourse involving scientific, causal arguments alters sovereignty as practiced more readily than the same redefinition established through interest-based argument, which, in turn, alters sovereign practice more readily than such a redefinition established through moral or principled arguments.² Causal belief-based discourse leads states to accept and

abide by new sovereignty norms if those states share causal beliefs and an acceptance of the process by which they are validated and changed. Interest-based discourse leads states to accept and abide by new sovereignty norms if those states share an acceptance of the structure of power and interests in the international system. Principled belief-based discourse leads states to accept and abide by new sovereignty norms if those states share an acceptance of the values and principles underlying that discourse.³ In the whaling case, causal, scientific discourse appears to have fostered the norm of collective decision making most. The whaling case provides a useful laboratory for analyzing these issues because the three discourses are temporally separated. In other environmental issues, the three discourses tend to be more intertwined. Thus, whether findings from the whaling case generalize to other environmental issues remains an open question for future research.

During different phases in the whaling regime's history, member states have used scientific, interest-based, and moral arguments to justify a single redefinition of sovereignty. At the inception of the International Whaling Commission (IWC) in 1946, the whaling states negotiated a *de jure* change to international legal norms of sovereignty: States agreed to determine the quantity, type, location, timing, and methods of taking from the international common-pool resource of whales through collective rather than independent decision making.⁴ The IWC has had mixed success in its subsequent efforts to induce corresponding *de facto* changes in sovereignty. Initially, those advocating collective decision making relied almost exclusively on interest-based arguments. States submitted to this new norm of sovereignty to a limited extent but reverted to independent decision making whenever their short-term interests seemed at risk.

During a second phase, scientific arguments involving causal ideas about the state of whale populations and the likely consequences of maintaining then-current levels of whaling gained influence. These scientific arguments led states, despite their reluctance, to increasingly allow collective IWC decisions to constrain their whale hunts, even though neither their short-term interests nor the industry's "tragedy of the commons" dynamics had changed. During a third phase, morally based arguments for a complete discontinuance of whaling came to dominate IWC debates. Initially, when the policy recommendations of

moral arguments coincided with those derived from scientific arguments, morally based arguments appeared to reinforce the commitment to practicing the norms of sovereignty embodied in the treaty. However, in the current fourth phase, divergence between the policy recommendations of moral and scientific discourses have shown that morally based arguments fail, when operating alone, to induce governments to put agreed-upon legal norms of sovereignty into practice. Indeed, they induce a reactive resistance that has led states to explicitly reject the legitimacy of the norm both by word and by deed.

Norms of Sovereignty

We need not engage the recent debate regarding whether environmental issues are eroding state sovereignty, to recognize that environmental treaties, at a minimum, redefine and reconceptualize sovereignty.⁵ Norms of sovereignty can be defined as the set of standards governing a state's legitimate rights and authority within its borders, within the borders of other states, and in international areas outside any state's borders.⁶ States use treaty negotiations as one process, *inter alia*, by which to reconstruct the intersubjective consensus regarding these norms and "the actual content of sovereignty, the scope of the authority that states can exercise."⁷ Nations especially have taken to using international law to define and redefine what states can legitimately do and not do in the world's "not yet sovereignized" commons—such as the oceans, the atmosphere, and Antarctica.⁸ The standards that states have agreed, through treaties, should guide behavior constitute *de jure* norms that can be distinguished from the *de facto* norms or standards that actually guide behavior.⁹

The Four Phases of Discourse in the IWC¹⁰

Traditional legal norms of sovereignty hold that states can take ocean resources in international areas outside territorial limits "under a doctrine of freedom of access to them (a freedom which can be limited only with the consent of the participant state)."¹¹ In 1946, fifteen nations negotiated the International Convention for the Regulation of Whaling (ICRW) in an effort to avoid repeating the overexploitation of whale

stocks that had preceded World War II.¹² The convention formed an International Whaling Commission (IWC) of all member states to develop an annual “schedule” of restrictions on the quantity, type, and methods of whale catches. By so doing, the ICRW established a new *de jure* norm that delegitimized the then-current practice of each nation independently deciding the size and manner of its whale catch. Nominally, IWC members merely negotiated the rules governing various parameters of each year’s whaling. Yet, they thereby have been engaged in the metaprocess of inducing whaling states to engage in, and accept the outcomes of, these negotiations. This larger enterprise involved an effort to legitimize a new *de jure* norm of sovereignty, transforming it into a *de facto* practice, of states submitting to an ongoing process of collective, rather than independent, decision making about the limits to place on access to whale stocks.

The IWC has evolved through four different phases. From 1946 until the late 1960s, regulatory limits were established based on the preferences and power of what was essentially a “whalers’ club.”¹³ Scientific arguments exercised little influence in IWC debates, and morally based environmental arguments were completely absent. Nations negotiated collective quotas and made their fleets comply with those quotas only when they believed doing so furthered their short-term economic interests.¹⁴ A second phase began in the late 1960s, as increasing scientific expertise and consensus on whale population dynamics produced quota recommendations that diverged from those dictated by interest-based bargaining between competing economic interests. Nations increasingly accepted these alternative quotas derived from a scientific discourse, reverting to independent decision making with decreasing frequency. The IWC’s third phase was initiated as environmental NGOs introduced a new, morally based discourse. This discourse progressively gained influence and, by 1982, produced a moratorium on commercial whaling that had little scientific rationale. At first, whaling states reluctantly accepted the moratorium, refraining from commercial whaling. More recently, however, a fourth phase has emerged in which exclusive reliance on arguments grounded in moral beliefs have decreased the whaling states’ commitment to the process of collective decision making, with scientific and commercial whaling outside IWC purview increasing in frequency.

During all four phases, the IWC sought to supplant a norm of independent decision making with one of collective decision making. The success of these efforts varied across the phases, correlating with shifts in the discourse used to justify this new practice of sovereignty. The next four sections of this chapter analyze each phase by reference to three common questions. First, did the IWC produce meaningful, collectively determined quotas, i.e., did IWC quotas diverge from what would be predicted from simply aggregating the independent decisions of member states? Second, what discursive rationales were used to convince states to accept IWC quotas and, in so doing, to accept a reduction to the traditional scope of sovereign decision-making power? Finally, did states actually accept these quotas?

The Dominance of Instrumental Discourse

Traditional international norms, treating whales on the high seas as a nonexcludable common-pool resource, had created the familiar incentives and classic problems of a tragedy of the commons. By 1946, a whaling industry increasingly feeling the costs of its own overexploitation of whale stocks sought “mutual restraint, mutually agreed upon.”¹⁵ To overcome these problems, the IWC began setting annual global quotas on the number of whales that could be taken. Member states, however, did not give the IWC the power to allocate this global quota among them. This management approach encouraged overinvestment in whaling equipment as each firm tried “to take as many whales as it could before the season ended.” This overinvestment, in turn, created a self-perpetuating dynamic that made it “hard to persuade managers that lower quotas were needed.”¹⁶

From its inception until the late 1960s, the IWC’s quotas diverged little, if at all, from the catches one might have expected in their absence. The initial quota of 16,000 blue whale units (BWUs) (based on an arbitrary scientific “guesstimate”) was one-third lower than catches just prior to the hiatus in whaling during World War II.¹⁷ But this figure still exceeded then-current capacity (due to wartime losses) and did not pose a meaningful economic constraint.¹⁸ Whaling interests did not even argue for a higher figure because they did not expect to catch the full quota.¹⁹ Until 1962, quotas never went below 14,500 BWU, and

thereafter they continued to be “too high... at the insistence of the whaling countries, reflecting the demands of their whaling companies, despite the obvious decline in the whale stocks.”²⁰ Until 1965, the close correspondence between each year’s quota and the previous year’s catch data suggests that quotas were simply best estimates of what could be caught economically rather than genuine attempts to overcome collective action problems or to respond to scientific warnings.²¹ The declining quotas of this phase appear to have been driven largely by “the fact that the whaling nations were no longer able to fulfill their quotas.”²² Although whaling states recognized that global quotas encouraged overcapitalization, whaling interests frustrated attempts to negotiate national quotas until “most Antarctic whaling nations no longer found it profitable to continue their operations.”²³ In essence, little collective decision making was actually occurring.

When collective decisions were made about quotas, they were founded on arguments about economic power and interests, rather than science. For example, despite strong evidence of declining humpback stocks, the IWC’s first meeting in 1949 removed the original 1946 schedule’s ban on taking humpback.²⁴ By 1950, several member states viewed the 16,000-BWU quota as “too high,” but these voices were overridden.²⁵ Although whaling industry pressure could produce quotas that reflected their economic interests, it could not thereby resolve the underlying collective action problem. IWC membership was dominated by whaling states, and the available scientific advice was both highly uncertain and industry-based.²⁶ Not until 1961 did the IWC seek advice on population dynamics from an expert panel that was independent of the whaling industry. After fifteen years, IWC members finally began reducing quotas, going from 15,000 BWU in 1962 to 3,500 by 1966.²⁷ However, even these seemingly deep cuts rejected scientific recommendations for far deeper cuts and for replacing the BWU with species-specific quotas; scientists saw their work as almost “entirely ignored.”²⁸ Economic interests continued to dictate quotas, which remained high “not because governments were unaware of the cetologists’ concerns but, rather, because there was no other way to sustain the interwhaling state agreement.”²⁹

Even though the regime posed relatively minor constraints on their sovereignty, states consistently followed the traditional norm of indepen-

dent decision making whenever following the norm of collective decision making would have contradicted short-term economic interests. Whaling interests regularly threatened, or carried out threats, to ignore collective decisions by opting out of specific rules or withdrawing from the IWC. A 1954 ban on the taking of blue whales in the North Pacific and North Atlantic was rendered meaningless when every nation actually hunting blue whales in those areas opted out from the prohibition.³⁰ Norway and the Netherlands withdrew from the IWC from 1959 until 1962 to protest proposed quotas they viewed as overly restrictive.³¹ Other whaling states remained outside the regime. Panama, Chile, and Peru all found ways of avoiding IWC quotas.

In short, during this initial phase, states failed to establish catch levels different from those that would have occurred without the IWC, produced decisions through traditional interstate bargaining determined by economic power and interests, and ignored collective decisions whenever it suited their short-term interests. IWC members negotiated quotas in terms of economic self-interest, which failed to produce a de facto practice corresponding to the de jure norm of collective decision making enshrined in the ICRW.

The Dominance of Causal Discourse

From the 1960s through the 1970s, industry catch data increasingly confirmed scientific warnings that lower quotas were vital to maintaining whale stocks that could support commercial whaling. No longer could industry “discredit the cetologists’ case for quota reductions on scientific grounds.”³² Initially, this led to somewhat different quotas, but little difference in behavior. IWC members consistently rejected the Scientific Committees recommendations to abandon the BWU system, but they did adopt scientifically recommended limits on specific species and regional stocks. In 1963, IWC members rejected the Scientific Committees recommendation to ban taking of blue whales in the Antarctic but adopted a ban on taking humpbacks. A year later, the Antarctic blue whale ban was adopted, though all the countries whaling in that region subsequently filed objections.³³ Evidence that these species could still be economically harvested and that adoption of these bans did not merely codify existing interests comes from the fact, known at the

time, that non-IWC states (Chile and Peru) were taking blue and humpback whales and the recently revealed fact that Soviet whalers were catching large numbers of humpbacks during these years.³⁴

In 1967, the IWC set the first quota below scientific recommendations.³⁵ A New Management Procedure (NMP) using scientific estimates of sustainable yields to set quotas was regularly discussed, eventually adopted in 1974, and implemented in 1978.³⁶ Thus, between 1960 and 1980, scientific arguments gained power, producing a transition from quotas as mere aggregations of the expected individual catches of member states to low overall and species-specific quotas, which clearly resulted from collective, interdependent decision making. Causal discourse's increased influence arose from scientists' growing consensus regarding the decline in whale stocks, the whaling states' growing recognition that economically dictated quotas were failing to reduce overexploitation, and the nonwhaling states' growing willingness to reject the interest-based discourse of whaling states.³⁷ Scientific evidence transformed quota debates from revolving around, How will whaling states respond to an excessively low quota?, to revolving around, How will whale stocks respond to an excessively high quota? Setting quotas in response to the former required only diplomatic skill. Setting quotas in response to the latter required scientific advice. It also, however, involved a shift from short-term economic reasoning to longer-term ecological reasoning. Adoption of the NMP with its species-specific quotas reflected a new willingness of IWC member states "to give science [and the Scientific Committee's recommendations] a much more prominent, though not exclusive, place in the decision-making system."³⁸

By the 1970s, states successfully used scientific arguments to resist economic pressures for higher quotas as well as growing environmental pressures for a blanket moratorium. Surprisingly, whaling states joined other states at the 1972 United Nations Conference on the Human Environment in unanimously recommending a ten-year moratorium on all commercial whaling. In the ten years following that recommendation, moratorium proposals regularly came before the IWC. However, the commission's Scientific Committee consistently rejected such proposals because a moratorium on all whales would "directly conflict with these new [NMP] principles" of using scientific knowledge to manage

individual whale stocks.³⁹ The IWC's second phase exhibited a power-based bargaining dynamic quite different from that of the first phase. Whaling states no longer merely withdrew or opted out when quotas fell below their preferred outcomes. Nor did American pressure lead to adoption of a blanket moratorium. Science provided the focal point for compromises that kept whaling states "at the table" while pushing the moratorium off the IWC agenda until 1979.

IWC members not only adopted meaningful limits but increasingly conformed their behavior to those limits. The *de jure* norm of collective decision making was finally, albeit slowly, becoming a *de facto* norm. Whaling states' objections to global quotas ceased by the mid-1960s and objections to species-specific quotas ceased, with one exception, after the late 1960s.⁴⁰ By 1974, the commission was limiting catches of every species of whale without a single state protesting.⁴¹ Even when member states lodged objections, their behavior increasingly exhibited restraint. Japan, the Netherlands, and Norway caught few, if any, blue or humpback whales after objecting to regional bans on these species in the late 1960s. Although the Japanese and Soviets objected to a regional quota of 5,000 minke whales, they together took only 7,700 whales.⁴² Japanese whalers caught only two sperm whales before retracting their objection to a 1981 ban in response to U.S. pressure.⁴³ Large catches by Chile, Peru, and the Soviet Union confirm that Japanese, Dutch, and Norwegian whalers were actually practicing restraint, rather than merely failing to find whales.⁴⁴ Indeed, the failure of some states to respect IWC quotas demonstrated the economic viability of, and exacerbated the incentives for, continued whaling by all whaling states, since restraint was clearly not being reciprocated and species might well go extinct anyway.

The norm of collective decision making broadened as well as strengthened during this period. As even small-scale operations could threaten specific species stocks, IWC states increasingly sought to bring the whaling of nonmember states (e.g., Brazil, Chile, Panama, Peru, South Korea, and Spain) under IWC jurisdiction. Though nonmember whaling was clearly legal under international law and conformed with traditional norms of sovereignty, such free-riding undercut the developing norm of collective decision making regarding whaling. IWC members unanimously banned the import of whale products from, and the

transfer of whaling ships and equipment to, nonmember states.⁴⁵ At the same time, the United States used threats of economic sanctions to induce Chile, Korea, Peru, and Spain to join the IWC.⁴⁶

During this phase, collective decisions increasingly ran counter to members' short-term economic interests. Although perhaps too late for some species, IWC states had largely achieved, in law and in practice, the "mutual restraint mutually agreed upon" essential to overcoming the tragedy of the commons.⁴⁷ The shift arose from an increasing willingness of commission members to accept causal scientific, rather than self-interested economic, discourse as an appropriate basis for collective decisions. More whaling states became IWC members, and members objected to commission decisions far less frequently. If the IWC's initial history had been characterized by material interests determining both state positions and state action, with science opportunistically brought to bear to serve those predetermined positions, this second phase was characterized by positions and actions being developed in response to recommendations produced by new scientific paradigms, arguments, models, and data. Quotas and catches increasingly came to reflect calculations of population sustainability rather than calculations of economic viability. Scientific discourse, which initially had served merely as a new source of justification for old interest-based positions, transformed those positions to reflect scientific as well as material factors. By the end of this period, whaling states had come to accept collective decision making as a *de jure* and a *de facto* norm, not in response to political pressures but increasingly in response to ecological ones.

Before accepting such an analysis, however, two alternative explanations should be explicitly examined. American sanctions authorized under the Pelly and Packwood-Magnuson amendments and supported by domestic antiwhaling sentiments have been regularly turned to in the 1990s and might suggest that such economic pressure rather than scientific arguments explain increasing whaling state compliance with IWC decisions. However, the empirical evidence refutes such a claim. IWC whaling states were accepting and conforming to steeply declining commission quotas before the United States had passed such legislation, let alone invoked it. Antarctic whaling quotas *and catches* had already declined from 15,000 BWU in 1963 to 1,475 BWU by 1974,⁴⁸ the first year in which the United States threatened economic sanctions in

support of IWC regulations. That threat against Japan and the Soviet Union was never carried out and the United States did not threaten similar sanctions again until the late 1978 sanctions to induce Chile, Peru, Korea, and Spain to become IWC members.⁴⁹ It might also be claimed that scientific arguments merely helped clarify these states' material interests, i.e., science clarified states' interests without actually altering how they were defined. Such an argument runs counter to both the logic of the tragedy of the commons and the IWC experience. Discussions of population levels and maximum sustainable yields were not simply brought to bear in support of economic interests developed independently. Indeed, whaling states' interests in negotiating higher quotas or violating lower ones remained strong or increased during this phase: Since very low and declining whale stocks made extinction possible even without further whaling, and unregulated and clandestine whaling could still occur, each whaling state had strong incentives to hunt the last of the whales before they became extinct. Although no other country appears to have acted on these incentives, recent revelations of Soviet violations confirm that these incentives remained strong. The strategic structure of the tragedy of the commons had, if anything, been exacerbated by the declining resources on the commons. Scientific information did not merely clarify the "payoffs" of the game by improving estimates of expected catches, but instead altered states' understanding of the structure of the game itself. Scientific perspectives altered the discourse of states within the IWC from one concerned with the fundamentally political question of the short-term response of other states to one concerned with the fundamentally scientific question of the long-term response of the whale stocks.

The Dominance of Principled Discourse

Adoption of a commercial moratorium in 1982 illustrated the growing impact of a moral discourse that had been part of IWC debates since the 1970s. Most whaling states considered any moratorium economically undesirable and most cetologists considered a commercial moratorium that failed to distinguish between species scientifically unsound. However, a temporary moratorium appealed to those cetologists who sought time to improve the accuracy and certainty of their models; conserva-

tionists who sought to ensure the sustainability of whale stocks; and preservationists, deep ecologists, and animal rights activists who sought to protect all whales from human predation.⁵⁰ These actors' agreement on the desirability of a temporary "zero quota" on commercial whaling masked their fundamental disagreement over the principles that should guide the IWC's collective decision making.

By the late 1970s, collective IWC decision making took on new meaning. The whale had become "the most poignant symbol of the world environmental movement."⁵¹ Recognizing that the ICRW did not restrict membership and that a three-quarters majority could amend the schedule, environmental groups made a top priority of convincing nonwhaling states to join the IWC and vote for the zero quotas.⁵² Simultaneously, the United States was using economic and diplomatic pressure to induce nonmember whaling states to become commission members so that regime rules would apply more broadly. Together, these efforts transformed IWC membership from eight nonwhaling and eleven whaling members in 1978 to twenty-seven nonwhaling and twelve whaling members by 1982.⁵³ Collective decisions now needed to reflect the interests of states with neither a current nor an historical interest in whaling. Members no longer shared a common goal for the regime: Older members supported the traditional goal of conserving whale species to preserve the whaling industry, while many new members wanted to preserve all whales and end the whaling industry.

The commercial moratorium constituted a major rejection of both whaling interests and scientific guidance. Although much of the debate on the moratorium was framed in scientific language, support for the moratorium was grounded in moral, rather than scientific, principles. For example, although the moratorium provided for regular scientific reviews and reestablishment of catch limits based on a comprehensive scientific assessment no later than 1990, the IWC's own Scientific Committee and the Food and Agriculture Organization criticized the moratorium as deriving from aesthetic and moral principles with "no scientific justification."⁵⁴ Most scientists viewed a temporary moratorium as essential to the recovery of some species. But a *commercial* moratorium on *all* species lacked a sound scientific basis, simultaneously overprotecting some unthreatened species while underprotecting others that were threatened by even small-scale noncommercial aboriginal

whaling. The moratorium clearly constituted a different logical foundation for IWC decisions than either the independent interests that drove the first phase or the scientific advice that drove the second.

The influence of moral discourse on IWC debates does not imply that they had influence on the positions of all commission members. Indeed, Spain was the only whaling state that voted for the moratorium. Japan, Norway, Peru, and the Soviet Union immediately filed objections to it, basing their arguments in part on the requirement that "amendments be based on scientific findings."⁵⁵ Although domestic political forces ensured that the environmental principle of "saving the whales" informed the American position on the moratorium, the United States used far more material resources to induce whaling states to accept the decision of the IWC majority. Economic threats of reducing imports from or fishing rights of whaling states led Peru to remove its objections immediately and Japan to follow suit in 1987. Norway and the Soviet Union maintained their objections but stopped commercial whaling by 1987 and 1988, respectively.

The ascendance of moral argument reflected two trends. Scientific recommendations had become increasingly uncertain by the late 1970s because the New Management Procedure required data in excess of what member states were willing to provide.⁵⁶ "Internal disagreements about which model to use and how to interpret the data made it difficult to give the unified advice necessary to counter the influence of either the industry-oriented members of the IWC Scientific Committee or the environmentalists."⁵⁷ This increasing uncertainty and decreasing consensus were united with a shift toward preservationist, from conservationist, values even among IWC scientists, and increasingly close ties between many scientists and environmental groups.⁵⁸ In addition, activists committed to the rights of whales, who had previously relied on the IWC's dominant scientific rhetoric, increasingly shifted to an unabashedly moral discourse that saw whales as so unique that "they should not be killed at all [and] . . . had rights, comparable to human rights, to exist in the oceans without being exploited in any way whatsoever."⁵⁹ Setting whale quotas was no longer a scientific question but an "ethical question and whales should not be killed because it is unethical to kill them."⁶⁰ The "totemization" of whales transformed nominally scientific debates within the IWC into polarized political and moral debates.⁶¹

Surprisingly, despite their objections to a moratorium that reflected neither their economic interests nor scientific reasoning, the world's whaling fleets largely conformed with IWC decisions during the 1980s. Rather than following the 1950s' pattern of rejecting the IWC process and the moratorium outright, all whaling states chose to constrain their whaling within the limited legal outlets of scientific and aboriginal whaling. Not a single state withdrew from the IWC for ten years and U.S. pressure forced these states to end their commercial whaling, even if not to retract their objections to the moratorium. Although whaling states had issued relatively few scientific permits before the mid-1970s, Iceland, Japan, Korea, and Norway submitted scientific permit proposals to the Scientific Committee regularly in the late 1980s and early 1990s. Although these states issued these permits even after the committee rejected the proposals, the permits constituted quite limited takes (between 20 and 350 whales per year) compared to what might have been expected in the moratorium's absence.⁶² Although extensive use of scientific permits constituted a clear rejection of the moral "spirit" of the moratorium, all the whaling states except Iceland limited even their scientific whaling to the minke whale stocks which most cetologists considered quite healthy. Similarly, whaling states increasingly drew attention to the seemingly arbitrary distinction between "aboriginal" whaling allowed under the convention and "small-type coastal whaling" conducted by Japanese and Norwegian communities. Thus, during the 1980s, the whaling states proved unwilling to completely reject (by withdrawing) a collective decision for a moratorium that directly contradicted their interests while seeking ways to continue some whaling within the IWC framework.

In this third phase, the collective adoption of a commercial moratorium clearly diverged from what whaling states would have decided independently as well as from scientific guidance identifying the need for discriminating, species-specific quotas. The decision to adopt a moratorium instead was based on a moral and ethical discourse. Moral arguments from home or abroad to "save the whales" could influence the positions of those states that lacked countervailing economic interests and this, when coupled with the IWC's three-quarter-majority voting rule, produced a collective decision based in moral rather than economic or scientific interests. Given earlier experience, one might have

expected whaling states to simply reject the commission process and the moratorium outright. Yet whaling states took pains to stay within the letter, if not the spirit, of the limits dictated by the regime. Unlike the second phase, during which scientific discourse seemed to cause the behavioral conformance with the regime, the behavioral conformance of this phase seems likely to have stemmed from factors other than the rationale and discourse on which the collective decision was founded. Whaling states remained largely uncompelled, and indeed antagonized, by the moral arguments raised by environmentalists. Their behavior appears to have conformed with IWC dictates for three reasons: increasing U.S. economic and political pressure brought to bear to support the moratorium; a, perhaps inertial, "regime-mindedness" of whaling states valuing the long-term benefits of collective IWC decision making based on scientific discourse to solve the common-pool resource problem despite decisions that contradicted short-term interests; and a limited "room to maneuver" provided in the interim through scientific permits. Thus, during this transitional phase, principled discourse appeared to dictate the decisions of the IWC without contributing significantly to the behavioral conformance of whaling states with those decisions.

The Rejection of Principled Discourse

Since 1990, the IWC has entered a new phase in which whaling states appear increasingly willing to accept only those decisions grounded in scientific, rather than moral, discourse. When the IWC adopted the moratorium on whaling, scientific uncertainty about whale stocks and population modeling had created a debate that pitted the economic interests of whalers against the moral interests of various environmental groups. Scientific dissensus forced all sides to resort to arguments that the other side could interpret simply as interest-based. By the early 1990s, however, a new and strong scientific consensus emerged that certain species of whales could be hunted at limited levels without threatening survival of those species. This new consensus has brought the fundamental conflict in the principles of whalers, conservationists, and preservationists to the fore. The moratorium had held this conflict at bay by temporarily halting the practice of whaling without rejecting the principle of treating whales as a resource. As a policy that could be

"all things to all people," the temporary halting of whaling could be viewed as a means of allowing stocks to recover to optimal yields for harvesting, a means of allowing stocks to recover from the brink of extinction, and an end in its own right. The moratorium's requirement for future scientific review established causal beliefs as the legitimate discourse for collective decisions even while the moratorium itself overrode then-current scientific recommendations for more discriminating, stock-by-stock quotas. The initial moratorium decision constituted a classic example in which "the cultural role of science as a key source of legitimation means that political debates are framed in scientific terms; questions of value become reframed as questions of fact."⁶³

In the second phase, whaling states had submitted to IWC decisions that they opposed because they were consistent with scientific advice. The adoption and maintenance of a moratorium based on a moral discourse, and contradicting scientific advice, made these states increasingly skeptical that future IWC policy would be based on causal beliefs. That skepticism faced its first test with evaluation of the moratorium's effect in 1990.⁶⁴ By that year, many cetologists contended that minke whale stocks could sustain limited commercial harvests. Nevertheless, the IWC rejected Norway's proposal to recommence commercial whaling within scientifically prescribed limits.⁶⁵ By 1991, Scientific Committee estimates confirmed the strength of minke stocks.⁶⁶ However, the moral discourse of the 1980s had shifted the focus of commission debate from whether whale stocks *could* sustain whaling to whether they *should* sustain whaling. In 1992, the IWC adopted an improved Revised Management Procedure (RMP) that promised to provide more accurate quotas making it "possible to authorize a catch that year."⁶⁷ IWC members reiterated their support for the RMP in 1993 and the commission's secretary-general stated that, "In all reasonableness, we would have to say that a commercial catch could be taken without endangering [minke] stocks."⁶⁸ Despite these assessments, the IWC has extended the moratorium in every year since 1990. The commission has refused to authorize Japanese and Norwegian coastal whaling and, in 1994, adopted a whale "sanctuary" that outlawed both scientific and commercial whaling in Antarctic seas.⁶⁹ Maintenance of the moratorium, adoption of the RMP, and creation of the sanctuary demonstrate the IWC's continuing ability to arrive at collective decisions, despite increas-

ingly vehement opposition from whaling states. This ability owes much to the IWC's three-quarter-majority rule, which made adoption of the moratorium difficult but its repeal even more so.

The growing scientific consensus that limited whaling would not threaten certain species removed the previously plausible argument that continuing a blanket moratorium was warranted by scientific uncertainty. During the IWC's second phase, all sides had appealed to the same scientific principles, even while arguing over the scientific "facts." Now, however, different positions explicitly reflect different underlying principles. Environmental groups began to reject the scientific discourse they had previously embraced: "Even if humanity thinks that it has an ironclad 'scientific' banner under which to kill the whales, is that enough? Is the paradigm under . . . which it is okay to take the maximum number of a particular species according to a complicated calculation of 'sustainability,' defensible?"⁷⁰ In contrast, Japan's IWC representative sought to reject such a basis for commission decisions and revert to scientific principles: "We believe science and we believe scientists. We should not permit religious arguments in this field."⁷¹ Norway's representative claimed IWC decisions now reflect "cultural imperialism imposed by the majority of the members of the IWC on the local communities of the nations and peoples who want to exercise their sovereign cultural right to be different."⁷² IWC decisions have increasingly reflected moral principles, even explicitly rejecting scientific rationales at times. For example, the Antarctic sanctuary provision explicitly required that scientific advice be ignored, applying "irrespective of the conservation status of baleen and toothed whale stocks in this sanctuary."⁷³ Philip Hammond resigned as chair of the Scientific Committee because of the consistent rejection of the committee's advice.⁷⁴ The transitional third phase during which IWC decisions reflected a coincidence of interests among those concerned about scientific uncertainty, stock recovery, and moral principles, became a fourth phase in which, increasingly, only the last of these was relied on.

The overarching de jure norm of collective decision making remains intact in the ICRW, but the actual practice as exhibited by whaling state behavior, i.e., the de facto norm, has begun to erode. The reluctant willingness of whaling states to conform to IWC dictates during the 1980s began to unravel after 1990. Iceland withdrew its membership in

the IWC in 1992, and Japan and Norway have threatened to do so because of the commission's rejection of scientific arguments.⁷⁵ Norway, having maintained its objection to the moratorium, recommenced commercial whaling the day after the 1992 decision to extend the moratorium.⁷⁶ Notably, even in reverting to independent decision making, Norway recognized the legitimacy of scientific discourse, restricting its hunt to minke whales, setting a catch limit below that recommended by the Scientific Committee's Revised Management Procedure, and gaining Hammond's scientific approval before proceeding. Frustrated by the "feeling that a number of the IWC members over several years had not been negotiating in good faith," Norway, Iceland, Greenland, and the Faroe Islands established the North Atlantic Marine Mammal Commission (NAMMCO).⁷⁷ NAMMCO adopted the RMP as a guide for its decision making, embracing an IWC-approved scientific model the recommendations of which the commission itself has rejected in the face of moral arguments.⁷⁸ Japan is considering establishing a Pacific Ocean counterpart to NAMMCO.⁷⁹ Even subsistence Inuit whalers view NAMMCO as a desirable complement, perhaps alternative, to the IWC.⁸⁰ By replacing a global forum with a regional whale management regime, this move reaffirmed these states' commitment to a sovereignty norm of making whale management decisions collectively while rejecting that such collective decisions can or should be based on moral principles. Although, to date, only Norway has recommenced whaling, the elements that held whaling states in check during the 1980s appear to be weakening.

Whereas the late 1950s had seen Norway and the Netherlands operate outside the IWC in response to decisions reflecting excessive scientific influence, Norway, Iceland, Greenland, and the Faroe Islands have now chosen to operate outside the commission in response to decisions reflecting insufficient scientific influence. Growing scientific certainty has revealed a deep-seated divergence in principled ideas.⁸¹ Removing the scientific support for a moratorium converted a nominally scientific debate into a fundamentally moral and principled one.⁸² But whaling states appear less willing to abide by collective decisions based on moral principles that they do not accept. Indeed, the actions of whaling states in the last five years demonstrate that they accept the need for collective decisions, but only when those decisions reflect scientific discourse.

Certainly in the shorter term, the legitimacy of collective decisions within the IWC, and the willingness of states to accept the corresponding constraints on their sovereignty, "rests on expert scientific resource management, not beliefs held by members of the IWC about the sanctity of whales."⁸³

Analysis

How do arguments based in material interests, scientific knowledge, and moral principles explain the outcomes we observe in international regulation of whaling? Specifically, how did these three different forms of discourse influence the willingness of states to accept, in practice, a redefinition that placed new limits on traditional norms of sovereignty? This section analyzes the whaling experience and less systematic evidence from other cases to develop four propositions regarding the conditions under which different discourse types are likely to lead states to practice new norms of sovereignty.

The International Convention for the Regulation of Whaling was initially established to resolve a classic tragedy of the commons involving overfishing of whale stocks. To achieve Hardin's "mutual restraint, mutually agreed upon," states had to forego their sovereign right to set national whaling policies independently. The traditional sovereignty norm of free access to high seas resources needed to be replaced with collectively decided constraints on access. For the two decades after the IWC's formation in 1946, the rhetoric supporting acceptance of this new norm appealed to the economic interests of whaling states. In classic collective action fashion, quota levels reflected a competition between fear that maintaining high catch levels would decimate whale stocks and destroy the industry in the long term, and fears that reducing catch levels would impose even greater immediate costs on an overcapitalized industry. These interest-based arguments failed to compel states to conform their behavior to a new norm of collective decision making, at least whenever doing so conflicted with their immediate economic interests. Those states powerful enough to do so regularly reverted to the traditional norm of independent decision making. The regular withdrawal or opting out of collective decisions during the early years of the IWC document the inability of interest-based arguments to keep

governments at the table, let alone influence their behavior. In short, the discourse of IWC diplomacy was essentially epiphenomenal, with real bargains being struck only when they accurately reflected the outcomes that power and interests would have dictated anyway. Other fisheries regimes have experienced similar phases during some, if not all, of their evolution. We can also observe similar influences in the European acid rain debate: Weak laggard states quickly acceded to reduce sulfur dioxide emissions by 30 percent once Germany declared its willingness to do so. Germany's actions signaled these states that they were likely to be forced to accept these commitments anyway in the near future.⁸⁴

PROPOSITION 1. *Interest-based discourse leads states to accept new norms of sovereignty that conflict with their short-term interests only if that discourse convinces them that developing patterns of power and interests will force reluctant states to accept such norms in any event.*

Beginning in the late 1960s, the rhetoric within the IWC gradually shifted from economic interests to scientific causal beliefs. Faced with the failure of quotas arrived at through bargaining among economic interests, industry and governments increasingly sought out scientists and accepted scientific discourse in identifying solutions. Although scientific recommendations were regularly ignored, growing scientific discourse progressively strengthened a commitment to collective decision making. Objections and withdrawals became less frequent. Even when scientific consensus was weak, debates revolved around scientific knowledge and uncertainty. Although IWC members often used scientific uncertainty to justify interest-based disregard for scientific advice, they began reverting to independent decision making less often. As late as the 1980s, whaling states conformed their behavior to distasteful collective decisions because scientific uncertainty made outright rejection of a moratorium untenable within the dominant rhetorical context. Faced with uncertainty and conflicting causal beliefs, whaling governments accepted science as an appropriate discourse and scientific consensus as an arbiter of policy conflict. The legitimacy states accord the scientific paradigm led them to continue negotiating rather than revert to traditional norms of independent decision making. Since 1990, whaling state actions have confirmed that their commitment to collective decision making is contingent on those decisions being based in scientific, rather

than interest-based or principle-based, discourse. Scientific arguments have more readily compelled states to act collectively despite conflicts with short-term interests.

Why should scientific discourse prove more compelling than interest-based discourse? For whalers, overexploitation of whale stocks clearly constituted a traditional collective action problem. Within an interest-based discourse, analyzing the cause of declining whale catches focused states' attention on the current allocation problem, i.e., how to allocate existing stocks of whales. Framed in those terms, the dominant discursive focus became how other states would respond to one's own restraint. Thus, outcomes were seen as a function of short-term strategic interaction among states. Each state could plausibly convince itself that other states might exercise restraint, allowing it to reap the temptation payoff of defection in a prisoners' dilemma problem, a strategy most evident in the Soviet Union's clandestine catches of the 1960s. Since, in the short term, the whale stock could be considered a given, states could ignore nature's response to current overwhaling in calculating short-term payoffs. Scientific discourse, however, refocused attention on the concomitant future provision problem that plagues common-pool resources, that is, how to ensure adequate whale stocks for the future.⁸⁵ Framed in these new terms, nature's future response to current overwhaling could not be ignored. Scientific discourse also led states to recognize that nature, unlike other states, could not be deceived into providing the temptation payoff in response to their defection. Similarly, consider how scientific findings demonstrating that initial international regulations would not adequately protect the stratospheric ozone layer led to adoption of more stringent amendments, or how scientific discoveries helped overcome interest-based resistance to cleanup of the Mediterranean Sea.⁸⁶ Of course, the power of scientific discourse to influence behavior depends on the expected response of the natural system, the level of scientific consensus regarding that response, and the level of acceptance of that consensus by member nations. Scientific discourse facilitated collective decisions and conformance with those decisions in situations in which interest-based discourse did not, by transforming the calculus from one about how other states might respond to one's own overwhaling to how nature would respond.

PROPOSITION 2. *Scientific discourse leads states to accept new norms of sovereignty that conflict with their short-term interests when sufficient scientific consensus and acceptance of that scientific consensus leads states to focus their attention on how nature will respond to their actions rather than on how other states will respond.*

Beginning in the late 1970s, a growing international environmental movement reframed the debate over whaling, within and outside the IWC, in terms of principled moral beliefs. A widespread consensus on a temporary moratorium could be constructed on the basis of scientific discourse. However, a permanent, global ban on whaling could only be constructed on the basis of a moral discourse that rejected the temporary, species-specific bans supported by scientific discourse. By the 1990s, although the policy recommendations from these two discourses had diverged significantly, power, membership, and IWC voting rules prevented efforts to bring commission decisions back in line with the recommendations of scientific advisers. In response, whaling states have, become increasingly unwilling to accept IWC decisions. Recent whaling state rhetoric and behavior, especially the development of NAMMCO and its reliance on the IWC's scientific guidelines in the RMP, confirm that these states are not rejecting collective decisions per se, but rather selectively rejecting those collective decisions grounded in moral, rather than scientific, discourse.

For moral argument alone to lead a state to accept new norms of sovereignty and behavior requires that state to internalize a commitment to the underlying moral principles. Without such a commitment, "transforming state practices has come about [only] as a result of linking principled ideas to material goals."⁸⁷ Such tactics quickly become, at least to the target, identical to traditional interest-based arguments. It may be that the deep-seated transformation and internalization of values inherent to the logic of moral discourse simply takes longer to affect behavior than other forms of discourse, and that whaling states will, over time, accept the currently ascendant moral position. However, if the outcome of a negotiation grounded in interest-based discourse depends on the distribution of power, and the outcome of a negotiation grounded in causal belief-based discourse depends on scientific consensus and evidence, the outcome of a negotiation grounded in principled or

moral discourse seems to look the same and depend on the same factors as those grounded in interest-based discourse. Indeed, moral discourse in the whaling case has proved even less successful than interest-based discourse because it has evoked a reactive resistance from states that do not share the ascendant moral values.⁸⁸ In response to what Iceland, Japan, and Norway increasingly perceive as ecocolonialism and cultural imperialism, cultural pride and the assertion of sovereignty appear to drive behavior even as the economic stakes in whaling have atrophied with the rusting of the whaling fleets.⁸⁹ Malaysia's explicit rejection of a deforestation convention at the United Nations Conference on Environment and Development provides another illustration of this dynamic. In short, states tend to reject a new norm of sovereignty when its sole rationale lies in moral discourse.

PROPOSITION 3. *Moral discourse leads those states that do not accept the underlying principled beliefs of that discourse to reject new norms of sovereignty unless acceptance of those norms is induced through more direct, material incentives.*

This case highlights how the interaction between scientific consensus and principled beliefs influences state willingness to accept new norms of sovereignty. To vastly oversimplify, environmental protection finds support in two different philosophies: a "deep" ecology committed to an epistemologically unconditioned belief in limiting human exploitation of nature's intrinsic values, and a "shallow" ecology committed to an epistemologically conditioned belief in limiting human activities when science demonstrates that those activities threaten nature's instrumental value to humans.⁹⁰ The principles and logic of a shallow ecology make support for a policy that we should not kill whales contingent on scientific consensus regarding how human behavior influences the various species of whales. Scientific evidence that an activity causes harm will produce support for regulation, while evidence that exonerates a previously suspect activity will undercut such support. In contrast, deep ecology's moral principles dictate a policy of protecting whales (and nature in general) that is not contingent on scientific evidence. Indeed, scientific evidence becomes logically irrelevant.

The precautionary principle, which underpins several recent international environmental treaties, highlights the contingent rather than

determinist relationship of science and policy. By urging policy *action* in response to levels of scientific uncertainty traditionally used to rationalize policy *inaction*, this new legal principle demonstrates that deriving policy from scientific knowledge requires implicitly or explicitly value-laden judgments about social goals and norms, what constitutes evidence and consensus, and how we should respond to uncertainty and risk. In short, how and whether people derive policy guidance from a particular set of causal beliefs and scientific facts varies depending on often implicit moral principles regarding the role of science and the relationship of humans to their environment.

PROPOSITION 4. *Scientific consensus demonstrating an activity's instrumental harm to nature will mask the divergence in basic principles underlying environmental concern, strengthening support for environmental protection policies. Scientific consensus demonstrating the absence of such harms will highlight this divergence, weakening support for environmental protection policies.*

Conclusions

Security and trade negotiations seek to design cooperative policies to deal with conflicts primarily involving politico-economic interests.⁹¹ Negotiations on social issues, such as human rights, slavery, and trade in women and children, seek to design cooperative policies to deal with conflicts primarily involving normative values in which one side views these behaviors as illegitimate under any circumstances.⁹² International environmental negotiations seek to design cooperative policies to deal with conflicts among and within politico-economic interests, normative values, and scientific knowledge, presenting a more complex interplay of these three sources of pressure for international policy change. The nature of the global environmental problems governments and their citizens face often requires states to resolve a metanegotiation about norms of sovereignty with respect to the conditions under which states must make and abide by collective, rather than independent, decisions regarding their behavior. States have already created many of the necessary *de jure* redefinitions of sovereignty by negotiating and signing various environmental treaties and establishing corresponding regimes.

The whaling case suggests that states will be more likely to create the corresponding *de facto* redefinition of sovereignty, i.e., abide by collective regime decisions even when incentives for independent decision making exist, when arguments rely on scientific discourse rather than power and interests or moral discourse. The whaling case leads us to ask whether other environmental regimes support the claim that causal belief-based arguments are more effective than interest-based or principled belief-based arguments in leading states to accept and abide by collective decisions that constrain behavior previously considered a sovereign right.

If the emergence of world civic governance, pressure from environmental NGOs, and other processes create the deep-seated changes to values and behavior necessary to stem the tide of anthropogenic environmental damage, then *de jure* changes in international legal norms of sovereignty can come after the more important *de facto* ones that benefit the environment have occurred.⁹³ Unfortunately, those processes are likely to take considerable time to come to fruition. In the meantime, efforts, even if unsuccessful, should be made to develop international legal norms for collective decision making in arenas where independent decision making is the practice. The task ahead is to determine how best to induce states to abide by such collective decision making processes. The history of whaling suggests that, at least in the short term, regimes that foster scientific discourse can contribute more to the legitimacy and practical application of such norms than those that do not.

Notes

1. I want to thank Karen Litfin, Mark Zacher, Elizabeth DeSombre, and the participants in the conference on Rethinking Sovereignty and Environment for helpful criticisms of earlier drafts of this paper.
2. Kathryn Sikkink, "Human Rights, Principled-Issue Networks, and Sovereignty in Latin America," *International Organization* 47 (Summer 1993): 440.
3. The distinction used throughout this paper between interest-based, causal belief-based, and principled belief-based discourse builds on the work in Judith Goldstein and Robert O. Keohane, "Ideas and Foreign Policy: An Analytic Framework," in Judith Goldstein and Robert O. Keohane, eds., *Ideas and Foreign Policy: Beliefs, Institutions, and Political Change* (Ithaca, N.Y.: Cornell University Press, 1993), and Sikkink, "Human Rights," 411-41.

4. IWC, *Text of the International Convention for the Regulation of Whaling, 1946, and Its Protocol* (Cambridge, England: International Whaling Commission, 1956): Article 5.
5. Ken Conca, "Rethinking the Ecology-Sovereignty Debate," *Millennium* 23 (January 1994): 1-11; Ruth Lapidot, "Sovereignty in Transition," *Journal of International Affairs* 45 (Winter 1992): 330-31; 334; Sikkink, "Human Rights," 441.
6. Karen T. Litfin, "Sovereignty and Environment," chapter 1, this collection; Janice E. Thomson, "State Sovereignty in International Relations: Bridging the Gap between Theory and Empirical Research," *International Studies Quarterly* 39 (June 1995), 219; Daniel Philpott, "Sovereignty: An Introduction and Brief History," *Journal of International Affairs* 48 (Winter 1995): 357; and J. Samuel Barkin and Bruce Cronin, "The State and the Nation: Changing Norms and the Rules of Sovereignty in International Relations," *International Organization* 48 (Winter 1994): 107.
7. Stephen D. Krasner, "Westphalia and All That," in Goldstein and Keohane, *Ideas and Foreign Policy*, 260; Barkin and Cronin, "The State and Nation," 109; Stacy D. VanDeveer, "States, Seas, and Regimes: Who's Sovereign Now." Paper presented at 36th annual convention of the International Studies Association (Chicago, 1995): 4; and Gene M. Lyons and Michael Mastanduno, "International Intervention, State Sovereignty, and the Future of International Society," *International Social Science Journal* 45 (November 1993): 527.
8. I am indebted to Thom Kuehls for this insight.
9. VanDeveer, "States, Seas, and Regimes," 2.
10. The following policy history draws extensively on J. N. Tønnessen and A. O. Johnsen, trans. R. I. Christophersen, *The History of Modern Whaling* (Berkeley: University of California Press, 1982); Patricia Birnie, *International Regulation of Whaling: From Conservation of Whaling to Conservation of Whales and Regulation of Whale-Watching* (New York: Oceana Publications, 1985); M. J. Peterson, "Whalers, Cetologists, Environmentalists, and the International Management of Whaling," *International Organization* 46 (Winter 1992): 147-86; and David D. Caron, "The International Whaling Commission and the North Atlantic Marine Mammal Commission: The Institutional Risks of Coercion in Consensual Structures," *American Journal of International Law* 89 (January 1995): 154-74.
11. Birnie, *International Regulation of Whaling*, vol. 2, 77ff.
12. *Ibid.*, 168.
13. Steinar Andresen, "The Effectiveness of the International Whaling Commission," *Arctic* 46 (June 1993): 109.
14. *Ibid.*, 112.
15. Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (13 December 1968): 1243-48. For two excellent explications of the problems facing common-pool resources, see Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge, England: Cambridge University Press, 1990); and Richard Cornes and Todd Sandler, *The Theory of Externalities, Public Goods, and Club Goods* (Cambridge, England: Cambridge University Press, 1986).
16. Peterson, "Whalers, Cetologists," 159 and 161; and Andresen, "Effectiveness of IWC," 110.
17. Tønnessen and Johnsen, *History of Modern Whaling*, 157.
18. *Ibid.*, 491-92.
19. *Ibid.*, 506 and 514.
20. Ray Gambell, "International Management of Whales and Whaling: An Historical Review of the Regulation of Commercial and Aboriginal Subsistence Whaling," *Arctic* 46 (June 1993): 99.
21. See the chart of quotas and catches in Peterson, "Whalers, Cetologists," 165.
22. Andresen, "Effectiveness of IWC," 112.
23. *Ibid.*
24. Birnie, *International Regulation of Whaling*, 210.
25. *Ibid.*, 214.
26. Andresen, "Effectiveness of IWC,"
27. J. L. McHugh, "The Role and History of the International Whaling Commission," in William E. Schevill, ed., *The Whale Problem: A Status Report* (Cambridge, Mass.: Harvard University Press, 1974): 306.
28. Tønnessen and Johnsen, *History of Modern Whaling*, 619.
29. Peterson, "Whalers, Cetologists," 161.
30. Birnie, *International Regulation*, 227; and Sidney Holt and Nina M. Young, *Guide to Review of the Management of Whaling* (Washington, D.C.: Center for Marine Conservation, 1990); 4.
31. Tønnessen and Johnsen, *History of Modern Whaling*, 592ff.
32. Peterson, "Whalers, Cetologists," 161-64; McHugh, "Role and History of IWC," 311; and Steinar Andresen, "Science and Politics in the International Management of Whales," *Marine Policy* 13 (April 1989): 105.
33. Birnie, *International Regulation*, 321, 326, and 339.
34. *Ibid.*, 350; Alexey V. Yablokov, "Validity of Whaling Data," *Nature* 367 (13 January 1994): 108; and Caron, "IWC and NAMMCO," 171.
35. Andresen, "Effectiveness of IWC," 110; and J. Scarff, "The International Management of Whales, Dolphins, and Porpoises: An Interdisciplinary Assessment," *Ecology Law Quarterly* 6 (1977): 366.
36. Birnie, *International Regulation*, 453 and 464; and Ray Gambell, "Whale Conservation—Role of the International Whaling Commission," *Marine Policy* 1 (October 1977): 305.
37. R. Michael M'Gonigle, "The Economizing of Ecology: Why Big, Rare Whales Still Die," *Ecology Law Quarterly* 9 (Fall 1981): 158. Like the

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38. Andresen, "Effectiveness of IWC," 110.
 39. Birnie, *International Regulation*, 422 and 434.
 40. *Ibid.*, 438n 122.
 41. Tønnessen and Johnsen, *History of Modern Whaling*, 683–84; and Birnie, *International Regulation*, 556.
 42. Gene S. Martin, Jr., and James W. Brennan, "Enforcing the International Convention for the Regulation of Whaling: The Pelly and Packwood-Magnuson Amendments," *Denver Journal of International Law and Policy* 17 (Winter 1989): 298.
 43. Susan Geha, "International Regulation of Whaling: The United States Compromise," *Natural Resources Journal* 27 (Fall 1987): 931–40; Martin and Brennan, "Enforcing the International Convention," 293–315; and Dean M. Wilkinson, "The Use of Domestic Measures to Enforce International Whaling Agreements: A Critical Perspective," *Denver Journal of International Law and Policy* 17 (Winter 1989): 271–92.
 44. McHugh, "Role and History of IWC," 306.
 45. Birnie, *International Regulation*, 429, 471, and 503.
 46. Martin and Brennan, "Enforcing the International Convention"; and Wilkinson, "Use of Domestic Measures."
 47. Hardin, "Tragedy of the Commons."
 48. Tønnessen and Johnsen, *History of Modern Whaling*, 750; and McHugh, "Role and History of IWC," 306 and 310.
 49. Martin and Brennan, "Enforcing the International Convention," 298–99.
 50. Peterson, "Whalers, Cetologists," 155 and 169.
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 52. Birnie, *International Regulation*, 613–14.
 53. Peterson, "Whales, Cetologists," 177.
 54. Birnie, *International Regulation*, 616.
 55. *Ibid.*
 56. *Ibid.*, 485 and 507.
 57. Peterson, "Whales, Cetologists," 170.
 58. *Ibid.*, 169; and Andresen, "Effectiveness of IWC," 114.
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 63. Litfin, "Sovereignty and Environment," 4. Greenpeace, "Outlaw Whalers," 1.
 64. For discussions of recent dynamics within the IWC, especially including Norway and Japan's responses to them, see Robert L. Friedheim, "Moderation in the Pursuit of Justice: Explaining Japan's Failure in the International Whaling Negotiations." Paper presented at the Kyoto Conference on Japanese Studies, 1994; Dylan A. MacLeod, "International Consequences of Norway's Decision to Allow the Resumption of Limited Commercial Whaling," *International Legal Perspectives* 6 (Spring 1994): 131–58; Peter G. G. Davies, "Legality of Norwegian Commercial Whaling under the Whaling Convention and Its Compatibility with European Community Law," *International and Comparative Law Quarterly* 43 (April 1994): 270–95; Martha Howton, "International Regulation of Commercial Whaling: The Consequences of Norway's Decision to Hunt the Minke Whale," *Hastings International and Comparative Law Review* 18 (Fall 1994): 175–93; Cliff M. Stein, "Whales Swim for Their Lives as Captain Ahab Returns in a Norwegian Uniform: An Analysis of Norway's Decision to Resume Commercial Whaling," *Temple International and Comparative Law Journal* 8 (Spring 1994): 155–85; Caron, "IWC and NAMMCO"; and Skåre, "Whaling."
 65. Stein, "Whales Swim for Life," 169; and Peterson, "Whales, Cetologists," 182.
 66. Caron, "IWC and NAMMCO," 160.
 67. *Ibid.*
 68. Gambell, cited in Caron, "IWC and NAMMCO," 162.
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72. Stoett, "International Politics," 298.
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81. Sikkink, "Human Rights"; Kathryn Sikkink, "The Power of Principled Ideas: Human Rights Policies in the United States and Western Europe," in Goldstein and Keohane, *Ideas and Foreign Policy*, 139–70; and Goldstein and Keohane, *Ideas and Foreign Policy*.
82. Friedheim, "Moderation in Pursuit of Justice," 10.
83. Caron, "IWC and NAMMCO," 155.
84. Karen Litfin, personal communication, 1997.
85. For a discussion of the distinction between the appropriation and provision problems involved in common-pool resources, see Ostrom, *Governing the Commons*, 46–50.
86. Haas, *Saving the Mediterranean*.
87. Sikkink, "Human Rights," 437.
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93. Paul Wapner, "Environmental Activism and World Civic Politics," *World Politics* 47 (April 1995): 311–40; and Thomas Princen, Matthias Finger, and Jack Mann, "Nongovernmental Organizations in World Environmental Politics," *International Environmental Affairs* 7 (Winter 1995): 42–58.